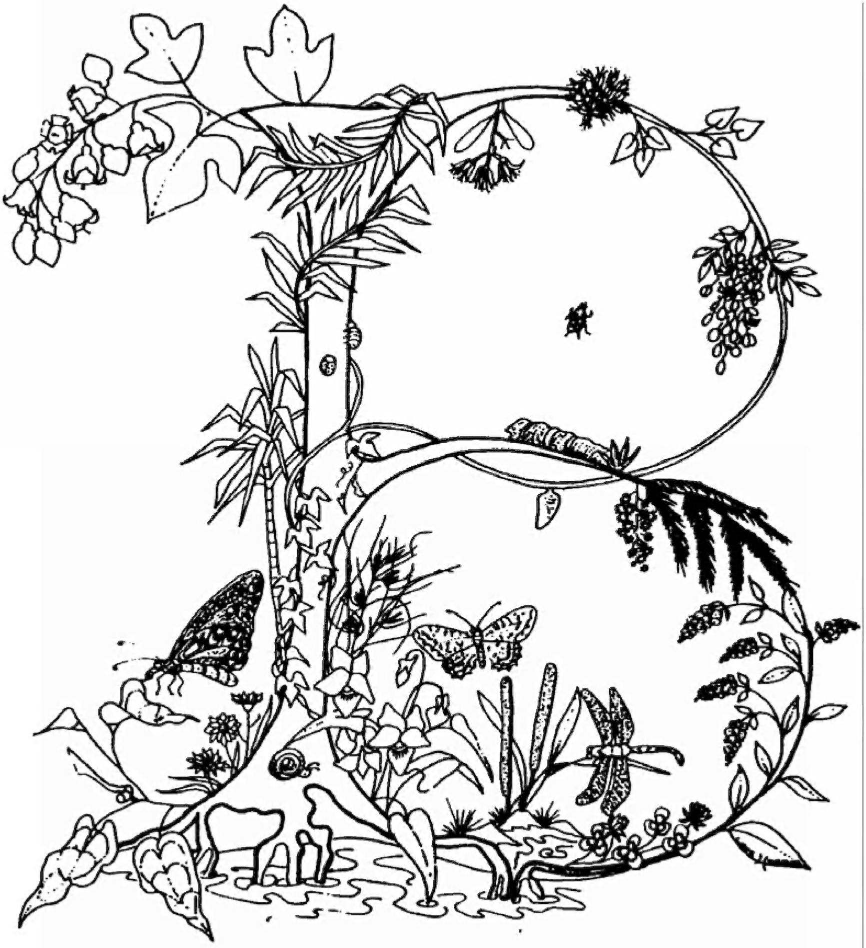

BUTTERFLY & Other INVERTEBRATES CLUB INC. NEWSLETTER

ISSUE NO: 5 DATE: MARCH 1997 ISSN: 1236-0006

OFFICE BEARERS 1997

President:	Helen Schwencke	07 3844 6677
Vice President:	John Moss	07 3245 2997
Treasurer:	Rob MacSloy	07 3824 4348
Secretary:	Georgina John	07 3349 1967
Newsletter:	Daphne Bowden	07 3396 6334
Librarian:	Terri Wolf	07 3814 3841
Register of Host Plants:	Rob MacSloy	07 3824 4348
Committee:	as above including Kay McMahon	

CONTACT ADDRESS

PO Box 2041, Runcorn 4113, Queensland

AIMS OF ORGANISATION

- To establish a network of people growing butterfly host plants;
- To hold information meetings about invertebrates;
- To organise excursions around the theme of invertebrates e.g. butterflies, fireflies, ants, dragonflies, beetles, freshwater habitats, and others;
- To promote the conservation of the invertebrate habitat;
- To promote the keeping of invertebrates as alternative pets;
- To promote research into invertebrates;
- To encourage the construction of invertebrate friendly habitats in urban areas.

NEWSLETTER DEADLINES

If you want to submit an item for publication the following deadlines apply:

March issue - January 21st;
June issue - April 21st;
September issue - July 21st;
December issue - October 21st

COMMITTEE MEETINGS

A quarterly meeting is now being scheduled in order to plan club activities and the newsletter. The next meeting is being held on Thursday 8th May, 1997 at 7.30 pm at 30 Melaleuca Drive, Capalaba. All members are welcome to attend.

EDITORIAL

Thank you to everyone for the great interest being shown to our Club Newsletter and planned projects and for all your help raising plants.

A prospective project by our club on conserving the Australian Fritillary Butterfly will be underlined by a talk this year to the Queensland Naturalists Club by CSIRO entomologist Dr. Don Sands. This talk to be held at the Queensland Museum on Monday June 16th at 7.30 pm will be titled "Butterfly - host plant interactions and their conservation". It is expected that Don will show slides of some of the spectacular PNG Birdwings as part of his talk, as well as his involvement with the Double Helix Club in conservation of the Richmond Birdwing Butterfly. In a previous talk at the Qld. Herbarium Don showed excellent slides of the Australian Fritillary Butterfly and its host plant!

In July, following Don's talk a public meeting will be organized to discuss the Fritillary Project.

We would like to hear back from you about how the programme we develop suits you and your interests. Please contact Helen with your feedback.

Georgina John

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CLUB PROJECTS

Australian Fritillary (*Argyreus hyuperbius inconstans).*

The last Committee meeting decided to hold a meeting to concentrate on the Australian Fritillary and its conservation. We hope to invite a range of people with expertise and plan to attract community members with an interest in this butterfly. The meeting will take place on 24th July. This will be elaborated on further in the next issue.

Butterfly Poster

We have applied for funding for the Swallowtails of the Border Region Poster as described in an earlier newsletter.

Incorporation

As of 25th January ,1997, the Club became Officially Incorporated. This was to enable us to apply for funding.

Helen Schwencke

CREATURE FEATURE

Sword Grass Brown Butterfly (*Tisiphone abeona albifascia*)

The Endangered Species Committee of the Total Environment Centre list the Sword-grass Brown Butterfly in their book "Our Wildlife in Peril" (1983). They state, "The survival of the Sword-grass Brown Butterfly is threatened by the rapid destruction of the Gahnia swamps in which it breeds, as these swamps are often in the path of urban development." The Knox Environment Society (Victoria) and the Knox City Council have begun a campaign to have the Saw-sedges (*Gahnia sieberiana*) , the food-plant of the butterfly's larvae planted in suitable reserves and schools. Local residents are encouraged to grow the food-plants on their property.

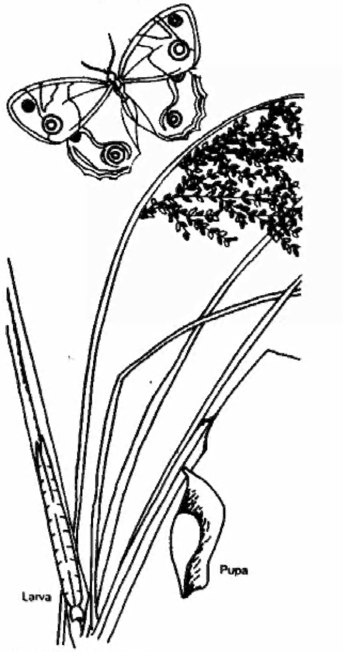
The Sword-grass Brown is an attractive chocolate-brown butterfly with orange markings and a blue eyespot on each forewing and eyespots ringed with orange on the hindwings. It has a wingspan of up to seven centimetres.

In Knox two generations of the butterfly are produced each year. The first emerges in Spring and their progeny fly in Summer and Autumn. Development of the second generation's young is slowed by Winter's cold and they don't mature until the following Spring.

On cool summer mornings the adult Sword-grass browns appear to cruise or drift or even float around the undergrowth. They rarely seem to flap their wings at all on a wind-free day. As the day warms they become more active, flying higher and with greater speed. They are an impressive

The sketch shown pictures the Red-Fruit Saw-sedge (*Gahnia sieberiana*) a favourite food plant of the Sword-grass Brown. Also sketched are the principal stages of the butterfly's development.

The Saw-sedge grows in thickets with arching, narrow, strap-like pale-green foliage with sharp edges. Each fruit tuft produces multiple stems bearing heads of minute flowers in Spring. These stand two metres plus tall and when mature contain numerous bright red seeds. They like moist areas and are part of our indigenous bushland.



As the adults fly around the foliage they usually seek a mate or a Saw-sedge for egg-laying. The eggs are green and laid individually. The very young caterpillars have black heads and pale green bodies while the full-grown larvae have green heads and bodies. They remain hidden, head downward, towards the base of Saw-sedge clumps during daylight and feed on the outskirts of the plant when it suits them.

When fully grown the caterpillars pupate. They attach themselves to their foodplant by a pad of silk and hang head down. Their chrysalis is green in colour. And while they don't feed and appear to be dormant the body inside is undergoing major structural changes. In Knox the pupal duration could be up to forty-five days in August and September whilst in February about twenty days.

(*This was an extract from a pamphlet produced by the Knox Environment Society Inc.*)

An article just to hand from CSIRO's Double Helix Science Club states "The swordgrass browns are becoming rare and are in fact extinct from the Gold Coast area due to extensive clearing of their natural habitat." *Ed.*

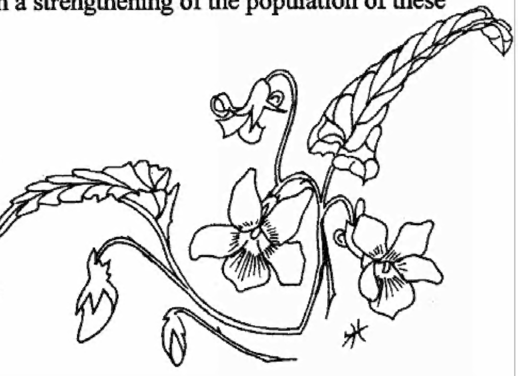
RAISING FRITILLARY BUTTERFLIES

The following is a summary of a talk given by Lorna Johnston at the Downfall Creek Bushland Centre on 26 November, 1996.

The Australian Fritillary (*Argyreus hyperbius inconstans*), together with the Richmond Birdwing, has gained much publicity over recent years, due to its increasingly rare status. Many other species of insect, no doubt, fall into the same category, and all insects are worthy of our club's attentions. At the moment our immediate concerns are with these two butterflies. It is hoped that the regeneration of food-plant into known and similar habitats will some day result in a strengthening of the population of these beautiful creatures. As Brisbane falls roughly midway between several known locations, both past and present, this may not be an impossibility.

The planting of the "Sword-leafed violet" (*Viola betonicifolia*) is encouraged wherever the habitat is suitable. In well-watered situations it will soon become established - it self-seeds readily in shade houses, so beware!

When bred in captivity many years ago (this is illegal now) larvae also fed on *Viola hederacea* and the exotic garden violet, so these may be considered in an emergency if food-plant is short, if you should happen to find them breeding in your garden!



Viola betonicifolia

Our Australian Fritillary is the only Aussie representative of this large group, other subspecies occur in New Guinea and S.E. Asia. Fritillaries are found commonly in Europe and Britain. Food-plants of many are violets, also plantains, meadowsweet, bramble and other small meadow and marsh plants in Europe and Britain where it hibernates over winter as larvae.

The slide programme presented to the Club's November meeting featured an assortment of life cycle slides. The fascinating creativity of the skipper family was illustrated, and a short segment on the Rare Red-eye Skipper (*Chaetocneme denitza)* larva was of particular interest.

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Lorna Johnston

STREAM INVERTEBRATES

Stream Invertebrates: *Diversity, Adaptations And Ecology*

Jon Marshall, Faculty of Environmental Sciences, Griffith University, Nathan, presented a talk to the Club on the above subject during 1996. He has kindly contributed the following article.

Invertebrates live in all manner of waterbodies from lakes and rivers to temporary ponds and ephemeral streams. For the purposes of this article I will limit discussion to those that live in the flowing water of streams. Many of these animals are easily overlooked but a great diversity of life displaying a multitude of forms, colours, adaptations and behaviour is waiting to be discovered in a creek near you. All you need to discover this underwater world is a hand lens and a little curiosity.

The fauna of streams is unusual in that it is usually dominated by the immature stages (larvae and nymphs) of insects. The adult stages of these insects are often terrestrial and short lived in comparison with the aquatic juvenile stages. For example, many mayflies (*Ephemeroptera*) live, feed and grow for months as aquatic nymphs. They emerge as winged adults which do not feed and don't even have functional digestive systems. These adults find a mate, lay their eggs and die, sometimes after only a few hours out of the water. They rarely live for more than a few days. This is an extreme example but the pattern is similar for many other groups of aquatic insects. The adult stages of these insects play the important roles of reproduction and dispersal. They often don't move very far away from the stream and can be found by sweeping a net amongst streamside vegetation.

The types of insects which are common in streams are: dragonfly and damselfly nymphs (*Odonata*), mayfly nymphs (*Ephemeroptera),* stonefly nymphs (*Plecoptera*), bug adults and nymphs *(Hemiptera*), caddisfly larvae (*Trichoptera*), beetle adults and larvae (*Coleoptera*), true flies (including mosquitoes!!) (*Diptera*), alderfly larvae (*Megaloptera*) and some moth larvae (*Lepidoptera*). There are also less commonly found insects.

Although insects are often the dominant life forms, they are by no means the only animals to live in streams. Some other common groups include worms (*Oligochaeta*), mites and spiders (*Arachnida*), planktonic crustaceans (*Copepoda, Ostracoda and Cladocera*), crayfish, prawns and shrimp (*Decapoda*), mussels (*Bivalvia*) and snails (*Gastropoda*). There are of course also many vertebrates such as fish, tadpoles, turtles and platypus which make streams their home.

In order to live in streams, invertebrates often require adaptations not found in their terrestrial cousins. They obtain oxygen either by diffusion through their body walls or via flattened extensions of the body called gills, or they make use of atmospheric air by periodically swimming to the surface to replenish a supply they carry as an external bubble trapped amongst hairs or in internal air tubes linked to a siphon they can poke out of the water.

Streams are characterised by the flow of water from the tops of mountains to the sea. In order to live in streams animals must resist this flow or else they will be progressively washed further down stream. They do this by maintaining their position by means of many structural adaptations and by actively moving upstream during some part of their life. Structural adaptations to resist or avoid strong currents include having flat bodies to take advantage of the relatively still boundary layer close to the stream bed, having streamlined bodies, suction devices, friction pads, strong claws, hooks, silk "life lines", ballast or behavioural modifications to live under stones or buried in the substrate.

The occurrence and distribution of stream invertebrates is influenced by a range of physical factors such as flow velocity, dissolved oxygen concentration, water temperature and the composition of the stream bed. Many species have very particular requirements. In general terms the greater the diversity of habitat types in a stream (e.g. variation in the stream bed from boulders to cobbles to sand or variation in flow velocity from slow in pools to fast in riffles), the greater the diversity of aquatic life in the stream. For this reason small highly variable headwater streams often have the greatest diversity of aquatic invertebrates.

Because of their specialized requirements for habitat and water quality, stream invertebrates can be used as highly sensitive indicators of disturbance to streams and are often used as pollution monitors. This is best achieved by studying communities of stream invertebrates at a site which is likely to be impacted both before and after the impact and comparing any changes which may have occurred at the impacted site with change over the same period at several other non-impacted sites. This is one example of a practical application for the study of stream invertebrates.

There is a very close relationship between a stream and the animals living in it and the streamside or *riparian* vegetation. Some authorities believe this relationship is so close that it is impossible to separate the ecology of a stream from that of its riparian vegetation. Riparian vegetation influences many aspects of the ecology of a stream such as light penetration, water temperature, bank stability, growth of algae and other aquatic plants, input of organic matter, input of sediment and nutrients and habitat complexity. It also provides important habitat for the adult stages of aquatic insects and terrestrial wildlife. Riparian vegetation falling into streams (as leaf litter, branches and logs) is the major energy source at the base of food webs in healthy streams., Unfortunately riparian vegetation has not been valued and has often been cleared or degraded resulting in damage to streams and reductions in the diversity of stream fauna. Much practical stream conservation involves riparian management and restoration.

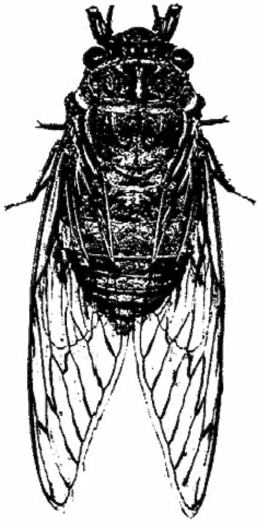
I hope this brief introduction to the life of stream invertebrates has encouraged you to go out and have a look in your local creek. There is a whole world in there for you to discover. If you would like to identify some of the animals you find, I recommend buying a copy of *Australian Freshwater Life* by W.D. Williams, published by The MacMillan Company of Australia, Melbourne, 1985. It should be possible to order a copy from a good bookshop.

EXCURSION REPORTS

EPRAPAH CREEK FIELD DAY - SATURDAY 9TH NOVEMBER 1996

The B.O.I.C. was extended an invitation to join with the Eprapah Creek Catchment Landcare Association Inc. and the Redland Shire Council's Nature Conservation Unit, for an excursion to the Upper Eprapah Creek catchment, where Eprapah and Little Eprapah Creeks joins, on the property of Col and Joy South at Victoria Point.

A range of organizations were invited and John Moss represented our Club and the Q.N.C. The day was very well organized, particularly due to the efforts of ECCLA Field Officer, Damien Madden, who presented a topographic catchment display



The Razor Grinder, *Henicopsaltria eydouxii*, is often plentiful in south-eastern Queensland and eastern New South Wales. Essentially a lowland species it does not extend inland beyond the foothills of the Great Dividing Range. Adults are usually found in dry and wet sclerophyll forests where large gum trees grow close together but in some areas rain forest margins are inhabited. Populations are highest during December and January. The song is a loud, coarse call resembling the grinding of metal from which the species takes its common name. Although singing can occur at any time of the day, dusk is the time most favoured. Singing often occurs in waves which sweep around hillsides, one group of individuals beginning the chorus and fading as the adjoining individuals begin, and so on. Photo G. May.

and map of the Eprapah Creek Catchment. Our friends Jon Marshall and Ngaire Phillips investigated the stream aquatic life, highlights of which were some beautiful dragonflies and native gudgeons. Dr Bernie Stone, ECCLA President, demonstrated water quality monitoring and Rosalie Eustace, RSC Bushcare Officer, had an excellent display of local native plants and weed species

Several of our commoner butterfly species were seen, and about six species of cicada were heard including the large and noisy Razor Grinder*(Henicopsaltria eydouxi)* Floury Baker *(Abricta curvicosta)* and several smaller cicadettas and pauropsaltas. Many butterfly host plants were in evidence including the Creek Sandpaper fig *(ficus coronata)* with the characteristic leaf etchings of the Common Moonbeam butterfly, as well as the Red Ash *(Alphitonia excelsa)* with chewing of beetles, looper moth (Geometrid) larvae and Small Green-banded Blue butterfly larvae.

It was a beautiful, warm and sunny spring day and well attended, except unfortunately by any other Butterfly Club members who would also have had a very interesting, informative and relaxing morning!

John Moss

SANKEY'S SCRUB EXCURSION AND LIGHT TRAPPING EVENING - Saturday 16th November 1996

We joined with the Queensland Naturalists Club for their 90th anniversary historic visit of Sankey's Scrub on the morning of Saturday 16th November last.

About 30 members, including children, were not put off by the hot weather, and gathered at the entrance to the Sankey's Scrub Environmental Reserve in Pine Mountain Road. The first part of the walk was through what was left of the scrub alongside the creek that runs parallel to Pine Mountain Road. Some of the highlights of this walk were the large trees of the White Beech, *Gmelina leichhardtii*, the uncommon *Cupaniopsis shirleyana;* some trees of *Macademia integrifolia* in their original genetic stock; the Black Apple, *Planchonella australis; Alectryon tomentosus; Wilkiea huegueliana,* the host plant of the Regent Skipper; the brilliant black spotted wing of the Yellow Tiger Moth, *Arginia astrea,* found by Robyn Popple; and a tiny snail that John Pearson identified as *Helicarion* sp.

Some members saw the smooth orange and black looper-like larvae of the Noctuid Moth on the vine *Stephania aculeata.* According to Ian Common's "Moths of Australia" this was probably *Calyptra minuticornis*.

We adjourned for lunch in Olivia Park, just a little further round to the east, and then had another short walk back into the scrub, under the canopy of large tallowwood trees (*Eucalyptus microcorys*). Some members found the large doors of trapdoor spiders in the bank of the creek, and further on the larvae of the "Evening Brown" butterfly

(*Melanitis leda*) was discovered on *Panicum maximum* or "Guinea grass", one of its host plants. Some small dark grey skippers were seen - which later proved to be *Toxidia rietmanni* the "White-Brand Skipper". Another beautiful skipper, *Hesperilla ornata*, the Spotted Skipper was also seen on a lantana flowerhead. Other butterflies included "Orchard Butterfly" (not "swallowtail" please as it has no tails), "Blue Triangle", "Glasswing" or "Small Greasy", and of course the very common "Common Australian Crow" butterfly.

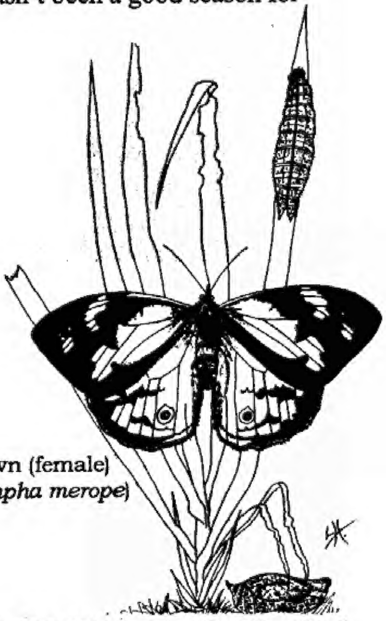
The main Q.N.C. excursion finished mid-afternoon on this very warm to hot day, but many of us rehydrated and returned with other Butterfly Club members in the evening, and with power supply from the nearby home of Wayne Cameron, a local conservation group member, John Moss was able to switch on his mercury vapour lamp, and we waited for the insects to arrive. The results were not outstanding, with just a few beetles, moths and other insects. However several specimens of the cicada *Pauropsalta annulata* "arrived" followed by a magnificent mantispid lacewing wasp mimic (still to be determined).

John Moss

Thick as Pea Soup: Our excursion to Crows Nest and Ravensbourne - Saturday and Sunday 18th and 19th January.

This was an excursion with a difference. Our first port of call was Mike Groth's place at Crow's Nest. Mike has a very attractive block of land, which we proceeded to explore under the threat of rain. Unfortunately it hasn't been a good season for butterflies, and so not very many were sighted.

However, for many of us the reward for coming was seeing our first example of the Common brown (*Heteronympha merope*) in a natural setting. Its larvae feed on a number of grass species, and has been recorded on Kangaroo grass (*Themeda australis*). As with many butterflies called "Common", it may be common in some places, but certainly isn't around Brisbane. Also the name belies the attractiveness of the creature.



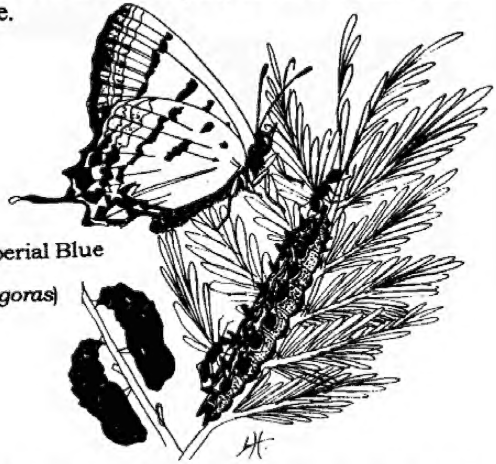
Common Brown (female)
(*Heteronympha merope*)

The Common Dusky Blue (*Candalides hyacinthinus*) was also sighted. Its larvae feed on the parasitic plant called Dodder (*Cassytha sp.)*. There are a number of different species of this plant. Common and Waterhouse have it listed on *Cassytha pubescens* in coastal south Queensland.

As the morning progressed the rain set in, making further exploration and our plans for light trapping at night impossible. Over lunch Mike shared some fascinating information about some of the different invertebrates he has found.

After lunch the group set off for Jim Johnstone's property in the vain hope there might be better weather. The closer we got to Jim's property, the thicker the fog became. It turned into a thick pea souper. Much fun was had during the afternoon as Jim gave groups of people a tour of his property on his buggy. However, the butterflies were taking a very low profile. At night the children in our company decided to build a fire in the rain and fog. They had a great time.

Sunday awoke to a bright and sunny day with considerably greater success in butterfly watching. Common imperial blue (*Jalmenus evagoras*) larvae and adults were found on and around a small *Acacia melanoxylon*. The highlight was seeing a Bright copper (*Paralucia aurifera*) near its food source *Bursaria spinosa*.



Common Imperial Blue

(*Jalmenus evagoras*)

Several other butterflies were spotted. These included the Common brown, Australian admiral (*Vanessa itea*), Painted lady (*Vanessa kershawi), Wanderer (Danaus plexippus*), Lesser wanderer (*Danaus chrysippus*), Common brown ringlet (*Hypocysta metirius*), Small green banded blue (*Danis hymetus)*, White lineblue (*Nacaduba kurava),* No brand grass yellow (*Eurema brigitta),* Common Pearl White (*Elodina angulipennis)*, Common grass blue (*Zizina labradus),* Speckled lineblue (*Catopyrops florinda*), Dingy swallowtail (*Papilio anactus*), Orchard butterfly (*Papilio aegeus*), Parvula skipper *(Toxidia parvula*). The larvae of the Dingy and Orchard swallowtails were making a meal of the citrus trees in the Johnstone's orchard.

Thanks go to Mike Groth and family and Jim and Betty Johnstone for making their facilities available to our club.

Bob Miller and Helen Schwencke

Imbil State Forest excursion - Sunday, 16th February

Orchard Butterfly (*Papilio Aegeus*)

At our meeting site at Kenilworth Town Park the excursion started with the sighting of a Common aeroplane (*Phaedyma shepherdi*),and Orchard butterfly (*Papilio aegeus*), a Lemon migrant *(Catopsilia pomona*) and a Lesser wanderer *(Danaus chrysippus*). The children accompanying us thoroughly enjoyed the wonderful and novel play equipment at this park.

At Imbil State Forest, due to the bad season for butterflies, only a small number were sighted where they had been in their hundreds last year. A Common crow (*Euploea core*) was spotted laying eggs on a *Secamone elliptica* and several Common migrants (Catopsilia pyranthe*)* were sighted. These were also noted laying on their host *Cassia barclayana*. An occasional Blue tiger *(Danaus hamatus)* flew past our excursion party. *Secamone elliptica*, their host plant, was found throughout the forest in the area.

Later in the day, after lunch, on a walk along a ridge in the forest, we struck 'gold' - a spectacular Fourbar swordtail (*Protographium leosthenes)* fluttering along the edge of the forest. This butterfly performed for several minutes before diving back into the forest canopy. We were treated to several performances by this graceful species.

A steep climb to the top of a knoll gave the intrepid butterfly fans amongst us the view of some hill-topping Glasswings (*Acraea andromacha)* and the highlight of a constant dogfight between 4 or 5 male Azures *(Ogyris genoveva).*

A number of other butterflies were also seen. These included the Speckled lineblue (*Catopyrops florinda*), Chalk white (*Elodina parthia*) and its food source *Caparris arborea*, No brand grass yellow (*Eurema brigitta*), Australian gull *(Cepora perimale*), Capaneus swallowtail (*Papilio fuscus*), the Big greasy (*Cressida cressida)* and its food plant *Aristolochia pubera.*

For those of us who were accompanied by children, the day finished with a swim at a lovely waterhole in Kenilworth State Forest. It was a lovely and cool end to a hot but interesting day.

Our thanks goes to Bob Miller for organising this excursion for the Sunshine Coast SGAP group and inviting our Club members to attend..

Helen Schwencke

OUTING TO THE LANDSBOROUGH AREA - SUNDAY 23rd FEBRUARY

A full report of this outing will appear in our next newsletter. It was an extremely successful day and one which those who attended will remember for a long time. At this stage it would be remiss of us not to offer our heart-felt thanks for the hospitality shown by Bob and Judy Miller, Arthur and Nerelle Powter and June Wimberley.

Rob MacSloy

YOU ASKED

Daphne asks - "Where are the butterflies when they are not about, e.g. during winter."

When we see the immense migratory flights of Blue Tigers and Caper Whites during late spring and early summer it's no wonder we ask "where have they been during winter?"

Although very little has been discovered about the phenomenon of diapause (or arrested development) it is known that butterflies in their various stages as egg, larva, pupa or adult can slow down development to await more suitable conditions to complete their life cycle.

This state is induced (and broken) by various triggers including temperature, number of daylight hours and the period of exposure to lower temperatures.

A good example of diapause is the Capaneus butterfly which can remain as a pupa for 1-2 years - a real test of endurance for any enthusiast awaiting to photograph and release the newly emerged adult!!

Over wintering aggregations of adult Wanderers and Common Crows are well known but during winter check around your garden and you May find other species quietly waiting for spring. Last winter a small group of Lemon Migrants were often seen in my garden resting in an Alamanda bush (well camouflaged too!!).

Rob MacSloy

LETTERS

The following letter was contributed by Lois Hughes. The wonderful illustrations throughout our newsletters are the work of this very talented lady.

Weeds as Butterfly Host Plants

Living as we do, surrounded by bushland and visited by many butterflies (and birds and other wild life) I have a great desire to paint them all, especially the butterflies. Armed with great curiosity, keen powers of observation and an eye for detail I sought to learn all about them and the plants they lived on. It's been a slow process, getting information from the very few Club outings I've been able to attend, several knowledgeable club members and through books and observation. I have been rewarded, fascinated beyond expectation as I've watched improbable miracles of creation unfold before my eyes. Native host plants I still have limited knowledge of, but weeds, well, we've had a close association with over our years of farming, trying to eradicate them, unsuccessfully of course. Now I find many are useful as butterfly host plants so I've decided to share my experiences with you, in the hope that others will respond and share theirs so newcomers like myself will be encouraged and gain more knowledge.

Lantana would have to be at the top of the list of rampant weeds that defy all efforts to eradicate it. However it is an excellent source of food and shelter for many small birds and of recent years I've realized what an excellent source of nectar it is for all sorts of butterflies. I was spellbound, one sunny morning, after days of rain as I saw thirteen different species of butterfly feasting on the lantana so we've learned to tolerate it in certain areas, trying to control it in others.

The Camphor Laurel and Jacaranda, both introduced species which can spread like weeds also provided me with an unforgettable few hours, as I sat in a secluded valley surrounded by Jacarandas, magnificent in bloom, along with dozens of Camphor Laurel. Dozens of Blue Triangles, along with Common Australian Crow and a few Orchard Butterflies quietly went about their lives. It wasn't until I came home I found in Common and Waterhouse that the Camphor Laurel was a host plant for the Blue Triangle.

Blue Triangle (*Graphium sarpedon*)

(Vanessa Itea) Australian Admiral

September and October were very exciting months of discovery and learning for me. The stinging nettles were flourishing in the front paddock and I found the top leaves sewn into tiny parcels and evidence of creatures within . A week later numerous dark caterpillars were found, less camouflages than when small, sheltering beneath larger lightly sewn leaves. I brought several indoors, putting the nettle stems through foil, as a cover over the glass, to prevent the caterpillars drowning. These growing caterpillars didn't closely resemble the colour of those I found illustrated in books and varied between themselves, also. They were predominately black/dark grey, all had finely branched spines, some dark, some almost transparent (depending on the colour beneath) and a series of yellow/orange curved lines and dots, running horizontally just about where the legs join the body. Underneath, all were a pale, semi-transparent green colour. I thought they had enormous appetites until I discovered other green caterpillars, which walked with a looping action also enjoying the nettles. I removed these, leaving only a beige coloured one, curious to see what it turned into, but it disappeared when quite large never to be seen again. Several very small caterpillars vanished too, and I actually found a spider having a lovely feed of one. I had quite a problem, you see, with four different species of caterpillars all doing their own thing,

Australian Admiral (*Vanessa itea*)

on table and desk top (and floor and walls, under the foil, under desks, on table legs and to his amazement on the inside front cover of my husband's new computer book!!!). I sat amongst the activity, magnifying glass at the ready, furiously trying to capture it all with pencil and paint on paper. I did succeed in producing a number of paintings without too many disasters, although I must confess to sucking one poor unfortunate Meadow Argus caterpillar into the vacuum cleaner as I attempted to keep the copious quantities of "poo" under control. He took some finding, in the dust, but a gentle brush off, a quick rinse and a tissue dry, saw him shell-shocked, but mobile again after a day of quiet recuperation.

Sadly, he was one which had been infested with tachinid fly and he never emerged from the chrysalis. What a story he could have told his offspring! Lorna Johnston made a good suggestion for making a cage using a polystyrene box, with lid. Cut a large section of the lid away and fix fine gauze material, with masking tape over the hole. It's portable and light and the gauze allows the activity to be observed and it can be used upright for tall plants and on its side for shorter ones. No more escapees, thanks Lorna. I got my box (ice) from Cocoa's for $1.00.

I observed many fascinating characteristics. The chrysalis' go through gradual colour changes, becoming quite dark with the orange of the wings showing through just before emergence. Some began green, changing to brown and developing spots of gold, some had no gold. Others were an off white colour with spots of beige and silver. Some of the caterpillars fell/jumped from the plant and wandered, pupating under "things". Once I realized what was happening I put them beneath a mesh "food cover" where they happily hung. This process occurred much quicker than the wanderer which sits for several days before pupating.

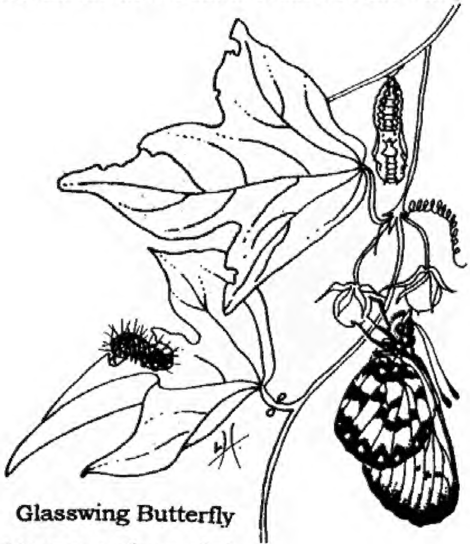
The caterpillars fed both night and day; maybe I confused them by having a light on sometimes. At first the slightest movement made them retreat underneath a leaf and hide, so they were very difficult to observe clearly, let alone draw!

The butterflies had a short, stout hairy body, were of medium size, with underneath wings like mottled grey/brown bark, with bars of black, cream, blue and orange on fore-wings. The upperside of the wings shade from orange/brown with black and a large area of cream and small white spots. It is a very difficult butterfly to observe because of its quick jerky movements, they were very impatient to be free, as soon as their wings were hardened. We had such a population explosion they ate all the nettles bare in our paddock, so I carefully collected the caterpillars and transferred them across the road to a vigorous new patch. These nettles (*Urtica urens*) only have a short period of growth and are an introduced variety, I believe. I would like to obtain the native nettle which is perennial, and so be able to enjoy these beautiful butterflies for much longer.

I'm glad no one saw me moving the caterpillars. Moving our horses to fresh pasture, yes, but caterpillars?!

Glasswing (*Acrea Andromacha*)

In early September about a dozen Glasswing caterpillars were daily observed on a Corky Passion Vine *(Passiflora suberosa)* entwined in a Macadamia tree. Each morning, large and small alike, congregated on the now denuded ends of the vine, larger ones often resting with the front section suspended. Care had to be taken not to bump the vine or they fell off! Gradually they disappeared and I eventually found several chrysalis in the nut tree so I brought them inside. The butterflies were released and the next day a female was noticed laying eggs on the fresh new growth of the same vine in the nut tree. Something ate them. I saw ants there but don't know if they were the culprits or just cleaning up the dregs. More were laid and as soon as they hatched I brought them inside. The caterpillars were incredibly tiny, with dark heads and a brownish body. They ate the soft new end leaves bare, leaving only the veins, then enmasse moved to each new leaf. Next they became very black with spines (a magnifying glass still needed to see detail) and grew quickly. Their bodies became more brownish as they expanded. The branched spines emerging from a raised circular spot were black and shiny, as if they were wet or oily. Although they weren't big eaters and spent a lot of time resting, first in groups and later singly, at this stage I took all but 4 outside because I couldn't keep up the food supply and they wandered everywhere. They tended to sit for quite a few days before



Glasswing Butterfly

(*Acraea andromacha*)

pupating. The chrysalis is very pretty, white with lacy black markings with orange/yellow spots. They wriggle a lot and sit in strange positions, especially if touched. Some turned grey or black just before emerging into a dainty medium sized butterfly with black and white/cream markings, the fore-wing being partially transparent.

To my knowledge we don't have the native passion vine (*passiflora aurantia)* growing but as I don't know what it looks like, it just might be here.

Lois Hughes

We're looking forward to hearing more of your experiences Lois. *Ed.*

An extract from a letter from Colleen Keena -" Last week (14.11.96) I had occasion to travel over Wivenhoe Dam. Just before and well after the dam there were thousands of Caper butterflies. Have never seen such a sight. Today there were still quite a few but not the incredible clouds of last week. Apparently the butterflies were dense all last week."

Thank you Colleen. *Ed*

LIBRARY BOOKS FOR LOAN

The following books are currently available for loan at meetings:-

Australia's Butterflies, by Peter Wilson

Butterfly Magic, by Helen Schwencke and Frank Jordan

Australian Cicadas, by Max Moulds

Butterflies of Australia, by Common and Waterhouse 1981

ADS AND EXCHANGES

Sometimes you may have an oversupply of legally obtained caterpillars of non restricted species and your food supply will not hold out. If this happens, contact Rob MacSloy - 07 3824 4348 - who operates the Register of Host Plants. He can put you in touch with prospective "foster parents". Have **YOU** advised Rob of the host plants you have available?

OTHER INVERTEBRATE ACTIVITIES

These activities are organized by the Redlands Conservation Unit

April 20th	Field Trip	Tingalpa
	From the source to Capalaba. A chance to look at some of the precious rainforest remnant in Redland Shire. We will be looking at Council owned reserves. Details upon registration. Phone: John Moss on 07 3245 2997 close to date in case of unforeseen circumstances.	
May 18	Field Trip	West Mt Cotton and Karingal
	A chance to look at the open forest along the eastern side of West Mt. Cotton Road. This is a large reserve and very similar to areas off Ford Road where E. curtisii has been found. Details as above.	

WORLD WIDE WEB SITES TO WATCH

The Western Australian Insect Study Society Inc. Newsletter of February 1997 mentioned a new World Wide Web site on butterfly plants. The address or URL is http://www.nhm.ac.uk/hostplants.

Gaden Robinson, a research entomologist at the Natural History Museum in London is seeking input from around the world as a way of recording hostplants permanently and making them available to the wider community. His email address is gsr@nhm.ac.uk

I visited this site recently, and it looks like it could be useful given time and Australian input. It was interesting to see how it was set up.

BUTTERFLY AND OTHER INVERTEBRATES CLUB INC. PROGRAMME

When: Sunday, March 23rd, 10.00 am

What: Freshwater Excursion led by Jon Marshall and Ngaire Phillips. We will be taken to a creek in the Conondale Ranges near Woodford which Jon has studied extensively for freshwater insects. Some rock hopping will be involved.

Where: Meet at Woodford Park, opposite the Post Office at Woodford

Bring: Picnic lunch, shoes that can get wet while walking in water, hat, sunscreen and insect repellant; swim suits for those wanting a dip at Stoney Creek Picnic area.

Contact: Helen Schwencke to RSVP or for more information - Ph. 07 3844 6677. It is wise to let Helen know of your intention to attend in case of unforeseen circumstances.

When: Sunday, 13th April

What: Launch of Redlands Arboretum

Where: Will be available at a later date

Contact: John Moss to RSVP or for more information.
Ph. 07 3245 2997

When: Saturday 19th April

What: Field Day at Arboretum when it is proposed that there will be planting of butterfly host plants

Contact: John Moss (as above)

When: Thursday, 22nd May, 7.30 pm
Where: Runcorn State School, cnr. Mains and Beenleigh Rds. Runcorn. Parking in Ardagie St.
Who: Guest speaker, Dr Kris Plowman will be talking about Ants. Kris has conducted Ant workshops for Brisbane Forest Park
Bring: Yourself and a friend.

When: Thursday, 8th May, 7.30pm
What: Committee Planning Meeting
Where: John Moss', 30 Melaleuca Drive, Capalaba
Who: All welcome

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ACKNOWLEDGMENTS

Producing this newsletter is done due to the efforts of:

- Those who sent in letters and articles
- Lois Hughes who provided illustrations and developed the cover design
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- Georgina John who works on editorial content and helps with design
- Helen Schwencke who developed the overall design and works on content
- Frank Jordan for inspiration.

We would like to thank all these people for their contribution

ARE YOU A MEMBER

Please check your mailing label for the date your membership is due for renewal. If your membership is due, please renew as soon as possible.

Butterfly and Other Invertebrates Club Inc.
c/- PO Box 2041
Runcorn Q 4113

Next Meeting:
Sunday, March 23rd - Freshwater Excursion in Conondale Ranges